KEMENTERIA PENDIDIKAN MALAYSIA

POLITEKNIK MALAYSIA

JABATAN MATEMATIK, SAINS DAN KOMPUTER

NAME	CARL ISAAC ANAK KELBIN	COURSE CODE/ COURSE NAME		DBM2033 DISCRETE MATHEMATICS
REGISTRATION NO.	05DDT18F1077	COURSEWORK ASSESSMENT		TUTORIAL 2
PROGRAMME/ SECTION	DDT2A	SESSION		DECEMBER 2018
		DURATION	60 MINS	CLO1 20 MARKS
				CLO2
				CLO3
		TOTAL MARKS		20 MARKS

15+2

EDWIN ANAK BANDANG
05DDT18F1129
DDT2A

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

Question 1

[4 marks]

CLO1, C2

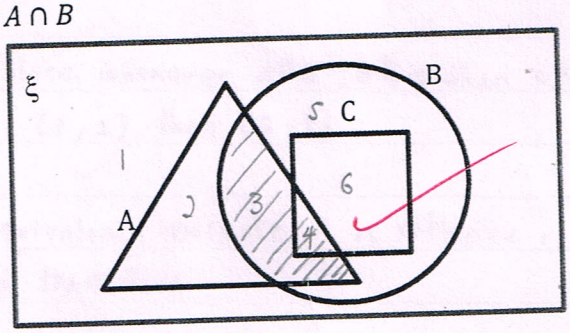
The Venn diagrams show the sets A, B and C such that the universal set, $\xi = A \cup B \cup C$. On the diagram, shade

(a) The set $A \cap B$

$A = \{2, 3, 4\}$

$B = \{3, 4, 5, 6\}$

$A \cap B = \{3, 4\}$



(b) The set $(A \cap B) \cup C'$

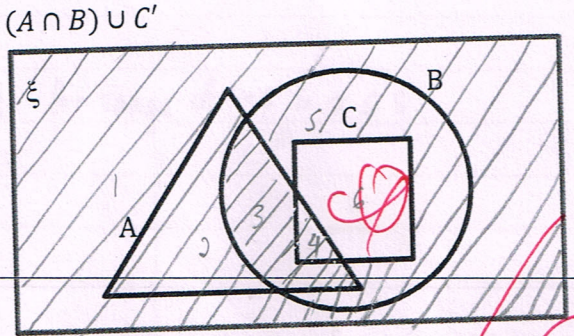
$A = \{2, 3, 4\}$

$B = \{3, 4, 5, 6\}$

$C = \{4, 6\}$

$C' = \{1, 2, 3, 5\}$

$(A \cap B) \cup C' = \{3, 1, 2, 5\}$



2

2

Question 2

[6 marks]

CLO1, C2

Given the relations {(1, 1), (1, 2), (2, 1), (2, 2), (3, 3), (4, 4)} on the set {1, 2, 3, 4}. Identify whether the relations given are equivalence relations?

Subject: Tutorial exercise 2

No: Monday

Date: 21/1/2019

Question 2

$\{(1,1),(1,2),(2,1),(2,2),(3,3),(4,4)\}$ on set $\{1,2,3,4\}$

Reflexive

It is reflexive since all the elements related to itself.

Symmetric

It is symmetric since whenever aRb then bRa such as $(1,2)$ then $(2,1)$.

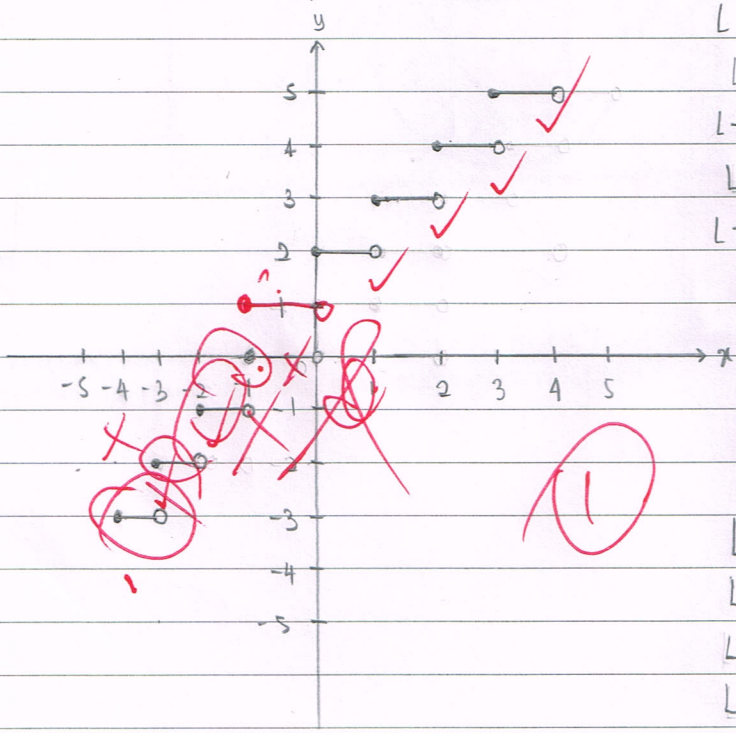
Transitive

It is transitive since whenever aRb, bRc then cRa, such as $(1,1),(1,2)$ then $(2,1)$.

∴ This set is equivalence because it is reflexive, symmetric and transitive.

Question 3

$f(x) = \lfloor x + 2 \rfloor$ for range of $-5 \leq x \leq 5$



$\lfloor -5+2 \rfloor$

$\lfloor -3 \rfloor = -4$

$\lfloor -4+2 \rfloor$

$\lfloor -2 \rfloor = -3$

$\lfloor -3+2 \rfloor$

$\lfloor -1 \rfloor = -2$

$\lfloor -2+2 \rfloor$

$\lfloor 0 \rfloor = -1$

$\lfloor 0+2 \rfloor$

$\lfloor 2 \rfloor = 1$

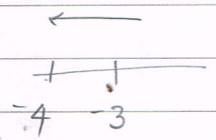
$\lfloor 1+2 \rfloor$

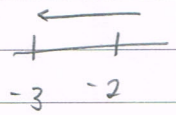
$\lfloor 3 \rfloor = 2$

$\lfloor 2+2 \rfloor$

$\lfloor 4 \rfloor = 3$

$\lfloor 3+2 \rfloor$





$\lfloor 5 \rfloor = 4$

Subject: No:

Date:

Question 4

Let $f(x) = -3x + 7$

$g(x) = 2x^2 - 8$

$fg(x) = -3(2x^2 - 8) + 7$

$= -6x^2 + 24 + 7$

$= -6x^2 + 31$ ✓ 3

$fg(-2) = -6x^2 + 31$

$= -6(-2)^2 + 31$

$= -24 + 31$

$= 7$ ✓ 3

6

KEMENTERIA PENDIDIKAN MALAYSIA

POLITEKNIK MALAYSIA

JABATAN MATEMATIK, SAINS DAN KOMPUTER

NAME	Marcello Anak Miga Mac Harry Anak Doren	COURSE CODE/ COURSE NAME		DBM2033 DISCRETE MATHEMATICS	
REGISTRATION NO.	05DDT18F1063, 05DDT18F1006	COURSEWORK ASSESSMENT		TUTORIAL 2	
PROGRAMME/ SECTION	DDT2A	SESSION		DECEMBER 2018	
		DURATION	60 MINS	CLO1	20 MARKS
				CLO2	
				CLO3	
		TOTAL MARKS		20 MARKS	

16+2

Well Done

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

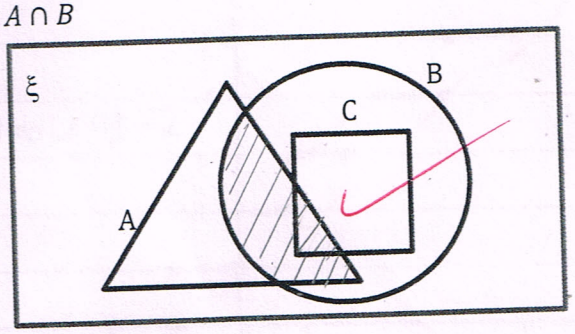
Question 1

[4 marks]

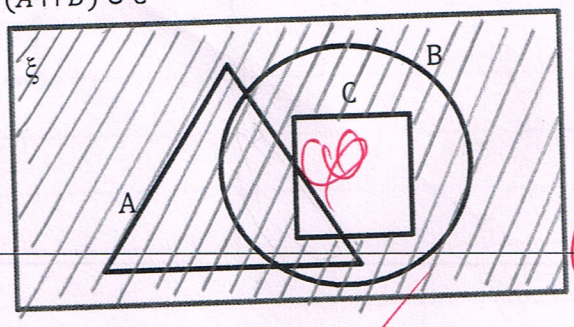
CLO1, C2

The Venn diagrams show the sets A, B and C such that the universal set, $\xi = A \cup B \cup C$. On the diagram, shade

(a) The set $A \cap B$



(b) The set $(A \cap B) \cup C'$



2

2

Question 2

[6 marks]

CLO1, C2

Given the relations {(1, 1), (1, 2), (2, 1), (2, 2), (3, 3), (4, 4)} on the set {1, 2, 3, 4}. Identify whether the relations given are equivalence relations?

Date:

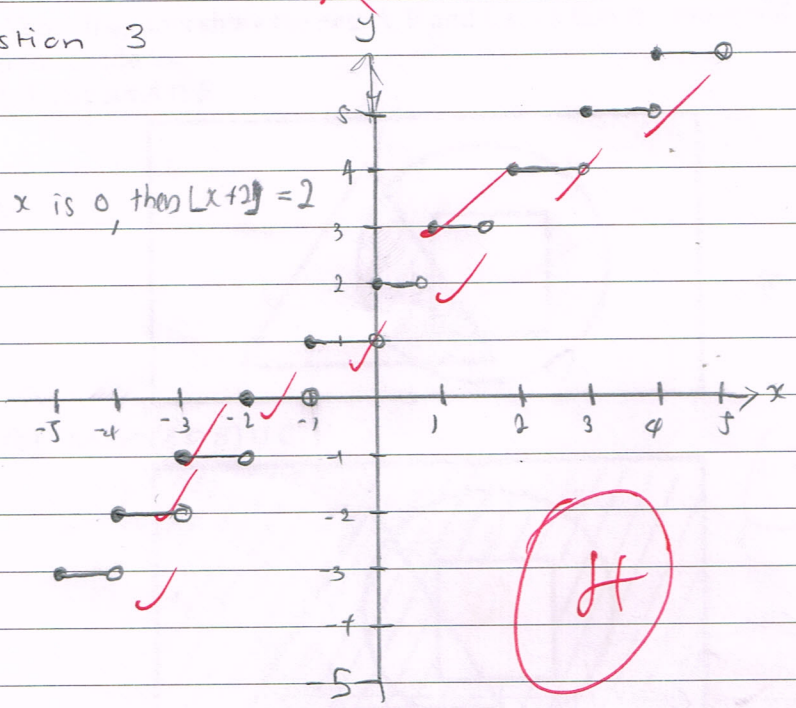
Question 2

- R = It is reflexive since (1,1), (2,2), (3,3), (4,4) ∈ R
- R = It is symetric since (1,2)(2,1) ∉ R
- R = It is not transitive since whenever (1,2) ∈ R, (2,3) ∉ R, (1,3) ∉ R.

= R is not equivalence relation because R is not transitive.

4

Question 3



4

Question 4.

6

$f \circ g(x) = f[g(x)]$
$= f(2x^2 - 8)$
$= -3(2x^2 - 8) + 7$
$= -6x^2 + 24 + 7$
$= -6x^2 + 31$

3

$fg(-2) = -6x^2 + 31$
$= -6(-2)^2 + 31$
$= -6(4) + 31$
$= -24 + 31$
$= 7$

3

KEMENTERIA PENDIDIKAN MALAYSIA / POLITEKNIK MALAYSIA JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		DBM2033 DISCRETE MATHEMATICS
		COURSEWORK ASSESSMENT		TUTORIAL 2
		SESSION		DECEMBER 2018
NAME	Muhamad Audi Bin Pasha	DURATION	60 MINS	CLO1 20 MARKS
REGISTRATION NO.	05DDT18F1099			CLO2
PROGRAMME/ SECTION	DDT2A	TOTAL MARKS		CLO3 18 / 20 MARKS

Viveiga 05DDT18F1130
Armann 05DDT18F1092

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

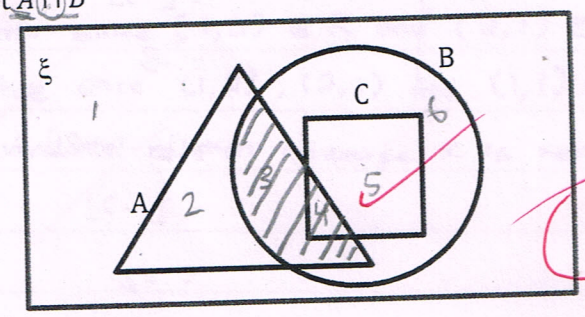
Question 1

[4 marks]

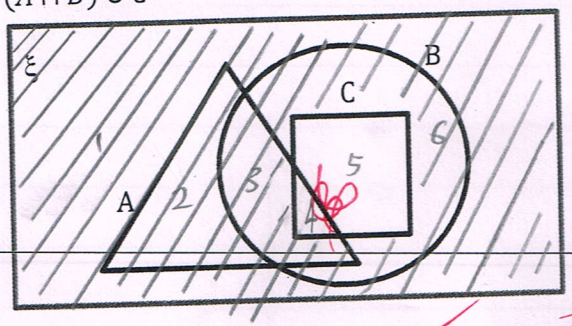
CLO1, C2

The Venn diagrams show the sets A, B and C such that the universal set, $\xi = A \cup B \cup C$. On the diagram, shade

(a) The set $A \cap B$



(b) The set $(A \cap B) \cup C'$



Question 2

[6 marks]

CLO1, C2

Given the relations {(1, 1), (1, 2), (2, 1), (2, 2), (3, 3), (4, 4)} on the set {1, 2, 3, 4}. Identify whether the relations given are equivalence relations?

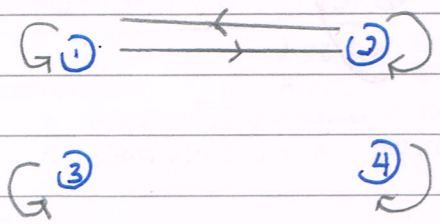
No.

Date

Question 2

Relation = $\{(1,1), (1,2), (2,1), (2,2), (3,3), (4,4)\}$

on the set $\{1, 2, 3, 4\}$



R is reflexive since all the elements loop to itself

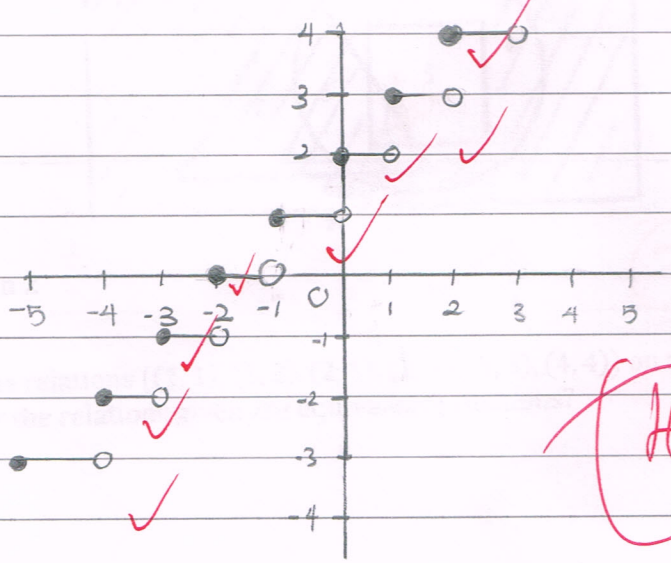
R is symmetric since $(1,2) \in R$ and $(2,1) \in R$.

R is transitive since $(1,2)$, $(2,1)$ and $(1,1) \in R$

Thus R is equivalence relation because R is reflexive, symmetric and transitive.

6

Question 3



4

$f(x) = \lfloor x+2 \rfloor$

$= \lfloor -5+2 \rfloor$

$= \lfloor -3 \rfloor$

$= -3$

$f(x) = \lfloor -4+2 \rfloor$

$= \lfloor -2 \rfloor$

$= -2$

No. _____

Date _____

Question 4

$f[g(x)] = f(2x^2-8)$

$= -3(2x^2-8)+7$

$= -6x^2+24+7$

$fg(x) = -6x^2+31$

$fg(-2) = -6(-2)^2+31$

$= -24+31$

$= 7$

KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK MALAYSIA JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME	DBM2033 DISCRETE MATHEMATICS
		COURSEWORK ASSESSMENT	TUTORIAL 2
		SESSION	DECEMBER 2018
NAME	Bonyface	DURATION 60 MINS	CLO1 20 MARKS
REGISTRATION NO.	05PD1178103I		CLO2
PROGRAMME/ SECTION	DD1 4B	TOTAL MARKS	CLO3 20 MARKS

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

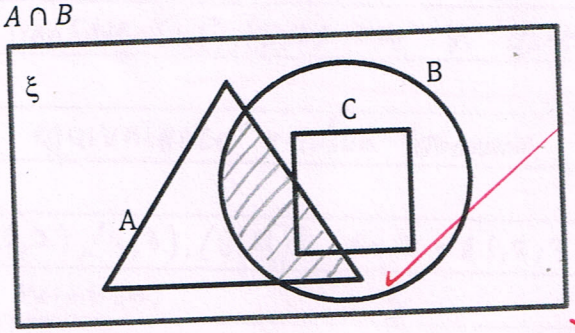
Question 1

[4 marks]

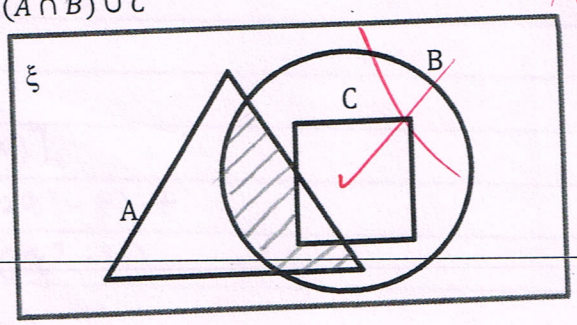
CLO1, C2

The Venn diagrams show the sets A, B and C such that the universal set, $\xi = A \cup B \cup C$. On the diagram, shade

(a) The set $A \cap B$



(b) The set $(A \cap B) \cup C'$



Question 2

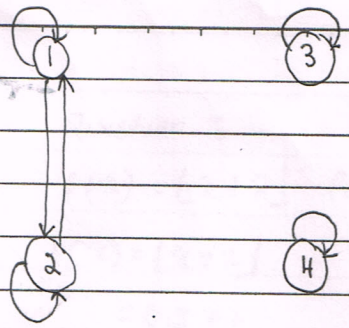
[6 marks]

CLO1, C2

Given the relations $\{(1, 1), (1, 2), (2, 1), (2, 2), (3, 3), (4, 4)\}$ on the set $\{1, 2, 3, 4\}$. Identify whether the relations given are equivalence relations?

Subject:..... No:.....

Date: . .



(1,1), (2,2), (3,3), (4,4) ~~is transitive reflexive because~~ in question 2 is reflexive since all the element loop to itself.

(1,2), (2,1) in question 2 is symmetric and ~~not assymmetric~~. why symmetric.

(1,2), (2,1) is transitive. (1,1), (2,2) are in question. so?

Question 2 ~~is~~ is equivalence relation ~~because~~

R {(1,1), (1,2), (2,2), (3,3), (4,4)} on X = {1,2,3,4} is equivalence relation. why?

(f+1)

Question 4

$(f \circ g)(x) = F[g(x)]$

$= -3(2x^2 - 5) + 7$

$= -(6x^2 - 31)$

$(g \circ f)(x) = g[F(x)]$

$= 2(-3x + 7) - 8$

$= (-3x + -15)$

No. .....

Date .....

Question 5

$f(x) = \lfloor x+2 \rfloor$ for the range of $-5 \leq x \leq 5$.

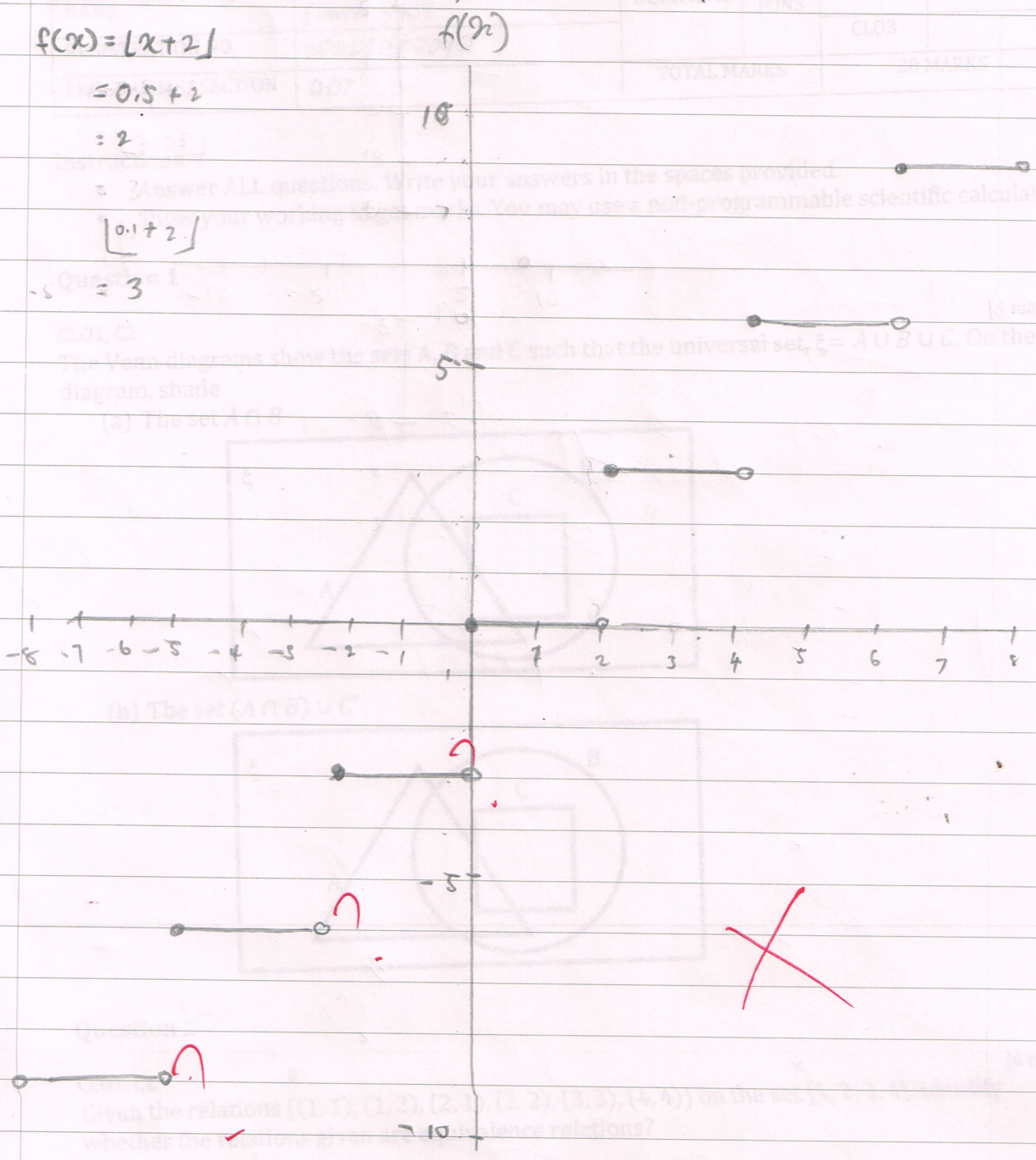
$f(x) = \lfloor x+2 \rfloor$

$= 0.5 + 2$

$= 2$

$\lfloor 0.1 + 2 \rfloor$

$= 3$



KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK MALAYSIA JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		DBM2033 DISCRETE MATHEMATICS
		COURSEWORK ASSESSMENT		TUTORIAL 2
		SESSION		DECEMBER 2018
NAME	IVY CHELSY , Syahirah	DURATION	60 MINS	CLO1 20 MARKS
REGISTRATION NO.	05DDT18F1001 , 05DDT18F1073			CLO2 2
PROGRAMME/ SECTION	DDT2A	TOTAL MARKS		CLO3 20 MARKS

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

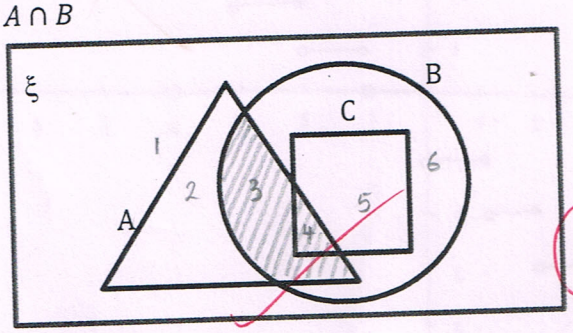
Question 1

[4 marks]

CLO1, C2

The Venn diagrams show the sets A, B and C such that the universal set, $\xi = A \cup B \cup C$. On the diagram, shade

(a) The set $A \cap B$



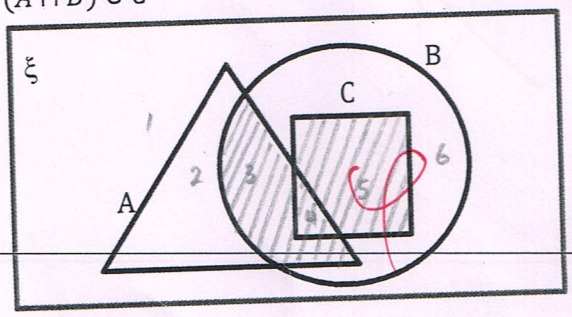
$A = \{2, 3, 4\}$

$B = \{3, 4, 5, 6\}$

$A \cap B = \{3, 4\}$

2

(b) The set $(A \cap B) \cup C'$



$A = \{2, 3, 4\}$

$B = \{3, 4, 5, 6\}$

$C = \{4, 5\}$

$C' = \{1, 2, 3, 6\}$

$(A \cap B) = \{3, 4\}$

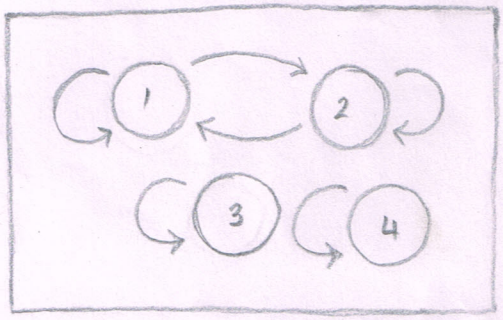
$(A \cap B) \cup C' = \{3, 4, 5\}$

Question 2

[6 marks]

CLO1, C2

Given the relations $\{(1, 1), (1, 2), (2, 1), (2, 2), (3, 3), (4, 4)\}$ on the set $\{1, 2, 3, 4\}$. Identify whether the relations given are equivalence relations?



R is said equivalence relation because R is transitive symmetric and reflexive. How you know?

Question 3

[6 marks]

CLO1, C2

Illustrate the graph for the function $f(x) = \lfloor x + 2 \rfloor$ for the range of $-5 \leq x \leq 5$.

Question 4

[6 marks]

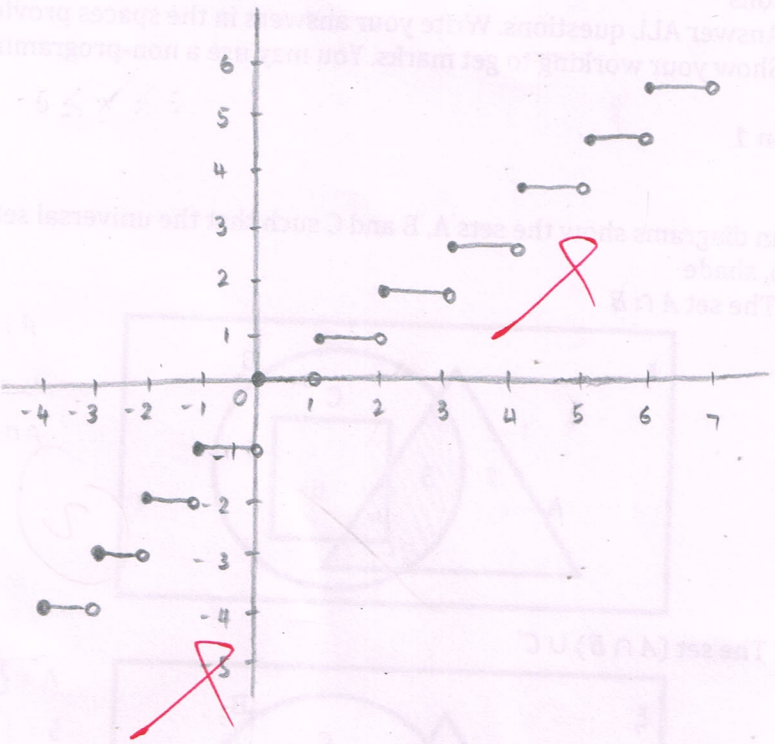
CLO1, C2

Let $f(x) = -3x + 7$ and $g(x) = 2x^2 - 8$. Compute ~~Compute~~ $fg(-2)$

Question 3

$f(x) = \lfloor x + 2 \rfloor$,

range of $-5 \leq x \leq 5$



Question 4

$f(x) = -3x + 7$

$g(x) = 2x^2$

$fog = fg(-2)$

$= f[g(-2)]$

$= f(2(-2)^2)$

$= 8(3x+3)^2$

$= 8(3x+3)(3x+3)$

$= 8(9x^2 + 9x + 9x + 9)$

$= 8(9x^2 + 18x + 9)$

$= 72x^2 + 144x + 72$

Farrian Scott 05DDT18F1054

Petrus anak Rantai 05DDT17F1035

KEMENTERIAN PENDIDIKAN MALAYSIA — POLITEKNIK MALAYSIA JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		DBM2033 DISCRETE MATHEMATICS
		COURSEWORK ASSESSMENT		TUTORIAL 2
		SESSION		DECEMBER 2018
NAME	NED DEEN BARANTAU	DURATION	60 MINS	CLO1 20 MARKS
REGISTRATION NO.	05DDT17F2018			CLO2
PROGRAMME/ SECTION	JTMK/DDT	TOTAL MARKS		CLO3 20 MARKS

Instructions
- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

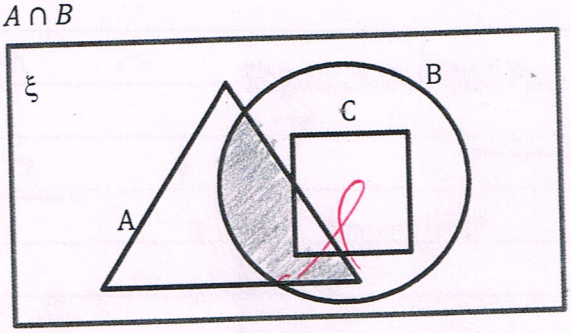
Question 1

[4 marks]

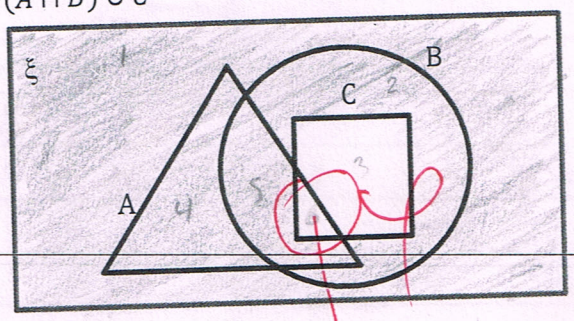
CLO1, C2

The Venn diagrams show the sets A, B and C such that the universal set, $\xi = A \cup B \cup C$. On the diagram, shade

(a) The set $A \cap B$



(b) The set $(A \cap B) \cup C'$



ada?

Question 2

[6 marks]

CLO1, C2

Given the relations {(1, 1), (1, 2), (2, 1), (2, 2), (3, 3), (4, 4)} on the set {1, 2, 3, 4}. Identify whether the relations given are equivalence relations?

No:.....

Subject:..... Date: . .

Tutorial 2

Question 2

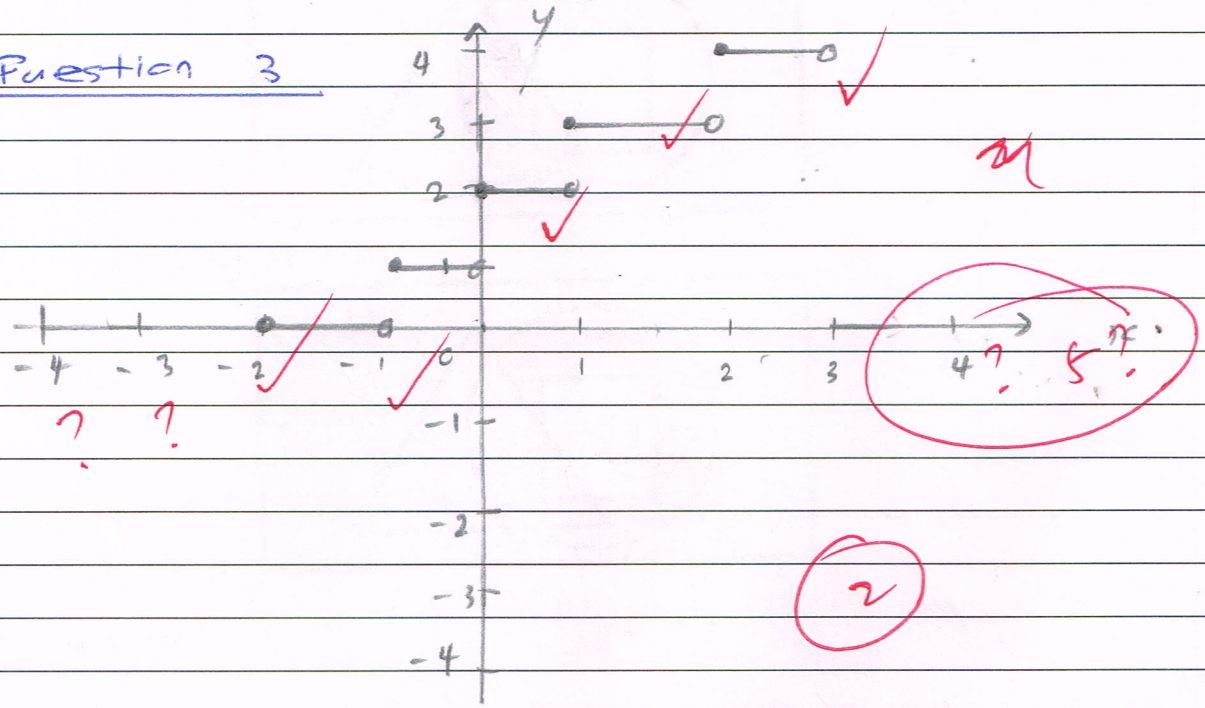
1. Relation is reflexive because (1, 1), (2, 2), (3, 3) (4, 4) related to itself.

2. Relation is symmetric because (1, 2) and (2, 1) a related to b and b related to a.

3. Relation is transitive because (1, 2) is in relation (2, 1) is in relation, then (1, 1) should be in relation. (a, b), (b, c) = (a, c)

∴ Relation is equivalence relation.

Question 3



$f(0) = \lfloor 0 + 2 \rfloor$
$= 2$

$f(1) = \lfloor 1 + 2 \rfloor$
$= 3$

$f(2) = \lfloor 2 + 2 \rfloor$
$= 4$

$f(-1) = \lfloor -1 + 2 \rfloor$
$= 1$

$f(-2) = \lfloor -2 + 2 \rfloor$
$= 0$

Subject:..... No:.....

Date: . .

Question 4

$f(x) = -3x + 7$ $g(x) = 2x^2 - 8$

$g(-2) = 2(-2)^2 - 8$

$= 0$

$fg(-2) = -3(0) + 7$

$= 7$

KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK MALAYSIA JABATAN MATEMATIK, SAINS DAN KOMPUTER		COURSE CODE/ COURSE NAME		DBM2033 DISCRETE MATHEMATICS	
		COURSEWORK ASSESSMENT		TUTORIAL 2	
		SESSION		DECEMBER 2018	
NAME	DIANA TRIN AK SUDOK Mohd Jaimi bin Jaingl	DURATION	60 MINS	CLO1	20 MARKS
REGISTRATION NO.	05DDT18F1060 / 05DDT17F1022			CLO2	
PROGRAMME/ SECTION	DDT2A / DDT4A			CLO3	
		TOTAL MARKS		20 MARKS	

(12+) 2

Instructions
- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

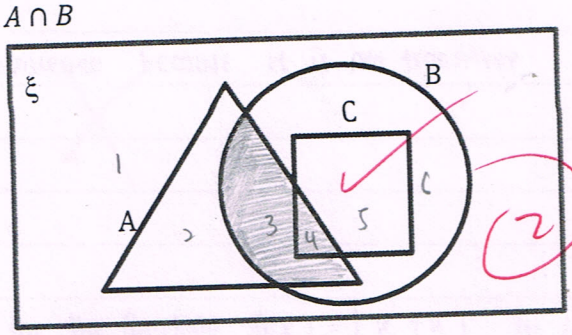
Question 1

[4 marks]

CLO1, C2

The Venn diagrams show the sets A, B and C such that the universal set, $\xi = A \cup B \cup C$. On the diagram, shade

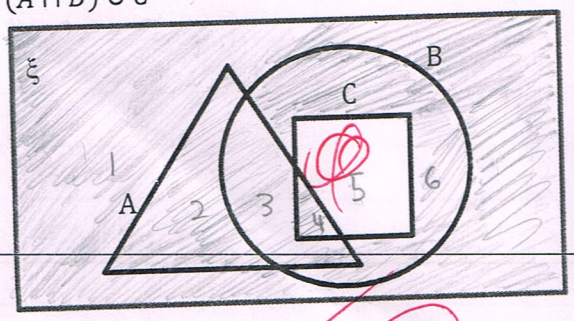
(a) The set $A \cap B$



A = { 2, 3, 4 }
B = { 3, 4, 5, 6 }
A ∩ B = { 3, 4 }

(2)

(b) The set $(A \cap B) \cup C'$



A = { 2, 3, 4 }
B = { 3, 4, 5, 6 }
C = { 4, 5 }
(A ∩ B) = { 3, 4 }
C' = { 1, 2, 3, 6 }
(A ∩ B) ∪ C' = { 1, 2, 3, 4, 6 }

(2)

Question 2

[6 marks]

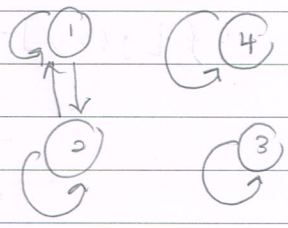
CLO1, C2

Given the relations {(1, 1), (1, 2), (2, 1), (2, 2), (3, 3), (4, 4)} on the set {1, 2, 3, 4}. Identify whether the relations given are equivalence relations?

Subject: No: Date:

Question 2

$R = \{(1,1), (1,2), (2,1), (2,2), (3,3), (4,4)\}$ ~~on the~~ set



Reflexive

- R is reflexive because all the elements are related to itself.

Symmetric

- It is symmetrical because
  $(1,2) \in R$ and $(2,1) \in R$

~~3~~ 4

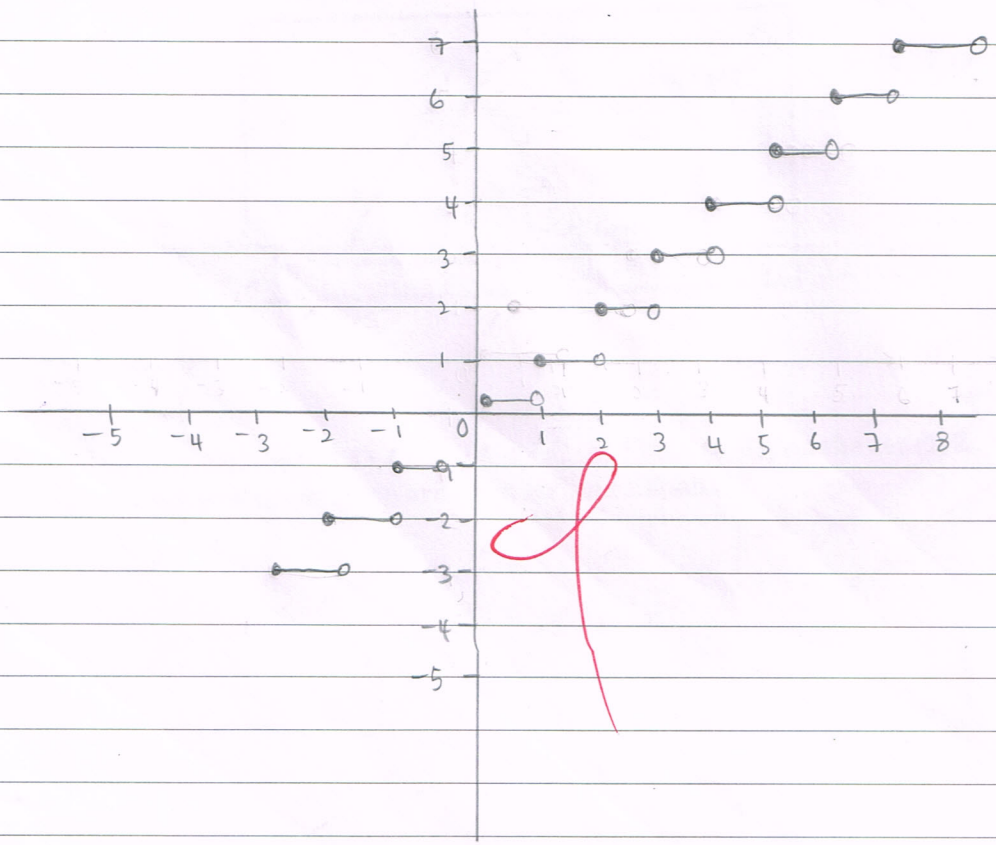
Transitive

- ~~Not transitive~~ because $(1,2) \in R$, but $(2,3) \notin R$ and $(1,3) \notin R$

Set R is not equivalence because it is not transitive.

Question 3

Illustrate the graph for the function $f(x) = \lfloor x + 2 \rfloor$ for the range of $-5 \leq x \leq 5$.



$\lfloor -5+2 \rfloor = \lfloor -3 \rfloor$	$\lfloor 5+2 \rfloor = \lfloor 3 \rfloor$
$\lfloor -4+2 \rfloor = \lfloor -2 \rfloor$	$\lfloor 4+2 \rfloor = \lfloor 4 \rfloor$
$\lfloor -3+2 \rfloor = \lfloor -1 \rfloor$	$\lfloor 3+2 \rfloor = \lfloor 5 \rfloor$
$\lfloor -2+2 \rfloor = \lfloor 0 \rfloor$	$\lfloor 2+2 \rfloor = \lfloor 6 \rfloor$
$\lfloor -1+2 \rfloor = \lfloor 1 \rfloor$	$\lfloor 1+2 \rfloor = \lfloor 7 \rfloor$

Subject:

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Date:

Question 4

Let $f(x) = -3x + 7$ and $g(x) = 2x^2 - 8$. Compute $fg(-2)$

$f[g(x)] = f(2x^2 - 8)$

$= -3(2x^2 - 8) + 7$

$= -6x^2 + 24 + 7$

$= -6x^2 + 31$

$f[g(-2)] = -6(-2)^2 + 31$

$= -24 + 31$

$= 7$

6

KEMENTERIA PENDIDIKAN MALAYSIA

POLITEKNIK MALAYSIA

JABATAN MATEMATIK, SAINS DAN KOMPUTER

NAME	ABIGAYLE ALYSHIA	COURSE CODE/ COURSE NAME		DBM2033 DISCRETE MATHEMATICS	
REGISTRATION NO.	050071BF1041	COURSEWORK ASSESSMENT		TUTORIAL 2	
PROGRAMME/ SECTION	DD72A	SESSION		DECEMBER 2018	
		DURATION	60 MINS	CLO1	20 MARKS
				CLO2	
				CLO3	
		TOTAL MARKS		20 MARKS	

NAMA : ASMA ARIFAH BT BERAWI
050071BF1086

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

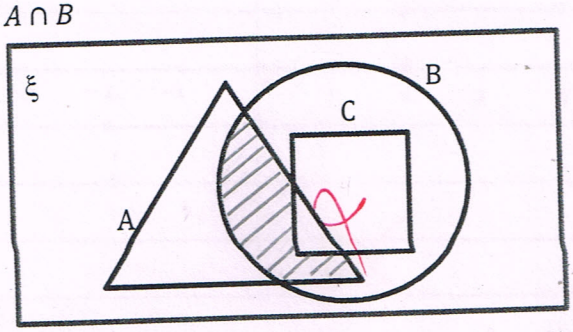
Question 1

[4 marks]

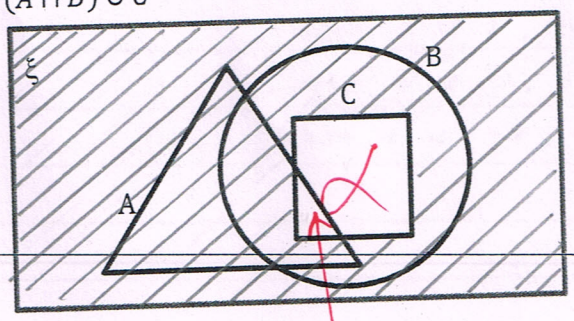
CLO1, C2

The Venn diagrams show the sets A, B and C such that the universal set, $\xi = A \cup B \cup C$. On the diagram, shade

(a) The set $A \cap B$



(b) The set $(A \cap B) \cup C'$



A 2, 3.
B 3 4
(3)

Question 2

[6 marks]

CLO1, C2

Given the relations {(1, 1), (1, 2), (2, 1), (2, 2), (3, 3), (4, 4)} on the set {1, 2, 3, 4}. Identify whether the relations given are equivalence relations?

No. ..... DATE: .....

Question 2.

The relation is equivalence relations because it is reflexive, symmetric and transitive,

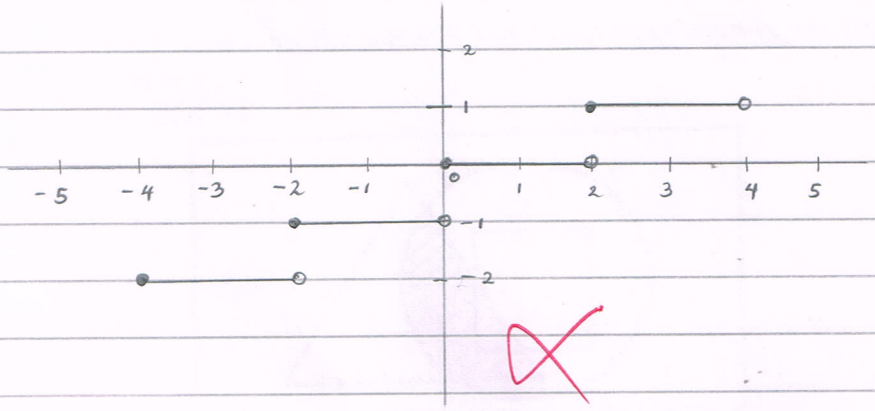
It is reflexive since all elements loop to itself.

It is symmetric since $(1,2) \in R$ and $(2,1) \in R$

It is transitive since $(1,2) \in R$, $(2,1) \in R$ and $(1,1) \in R$

6

Question 3.



X

when x is 0, then $\lfloor 0+2 \rfloor = 2$

when x is 2, then $\lfloor 2+2 \rfloor = 4$

when x is -2, then $\lfloor -2+2 \rfloor = 0$

when x is -4, then $\lfloor -4+2 \rfloor = -2$

Question 4

$f[g(x)] = f(2x^2 - 8)$

$= -3(2x^2 - 8) + 7$

$= -6x^2 + 24 + 7$

$= -6x^2 + 31$

6

$f[g(-2)] = -6(-2)^2 + 31$

$= -24 + 31$

$= 7$

KEMENTERIA PENDIDIKAN MALAYSIA — POLITEKNIK MALAYSIA		COURSE CODE/ COURSE NAME		DBM2033 DISCRETE MATHEMATICS
		COURSEWORK ASSESSMENT		TUTORIAL 2
		SESSION		DECEMBER 2018
JABATAN MATEMATIK, SAINS DAN KOMPUTER		DURATION	60 MINS	CLO1 — 20 MARKS
NAME	MILLENNIA ANAK CAWING FRANCISCA ANAK UBIN			CLO2
REGISTRATION NO.	05DDT18F1020			CLO3
PROGRAMME/ SECTION	DDT2A	TOTAL MARKS		20 MARKS

Instructions

- Answer ALL questions. Write your answers in the spaces provided.
- Show your working to get marks. You may use a non-programmable scientific calculator.

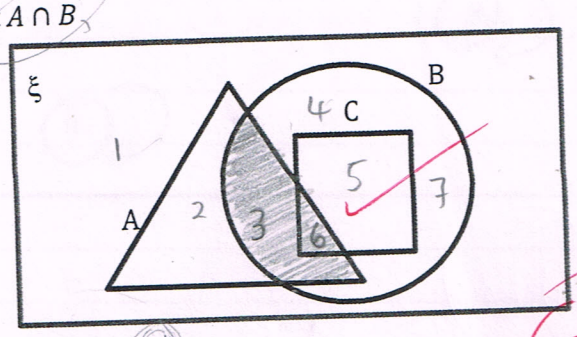
Question 1

[4 marks]

CLO1, C2

The Venn diagrams show the sets A, B and C such that the universal set, $\xi = A \cup B \cup C$. On the diagram, shade

(a) The set $A \cap B$



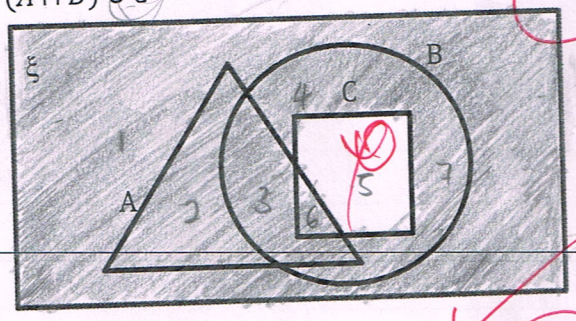
$\xi = \{1, 2, 3, 4, 5, 6, 7\}$

$A = \{2, 1, 3, 6\}$

$B = \{3, 4, 5, 6, 7\}$

$C = \{5, 6\}$

(b) The set $(A \cap B) \cup C'$



$\xi = \{1, 2, 3, 4, 5, 6, 7\}$

$A = \{2, 3, 6, 1\}$

$B = \{3, 4, 5, 6, 7\}$

$C = \{5, 6\}$

$C' = \{1, 2, 3, 4, 7\}$

$(A \cap B) = \{3, 6\}$

$(A \cap B) \cup C' = \{1, 2, 3, 4, 6, 7\}$

Question 2

[6 marks]

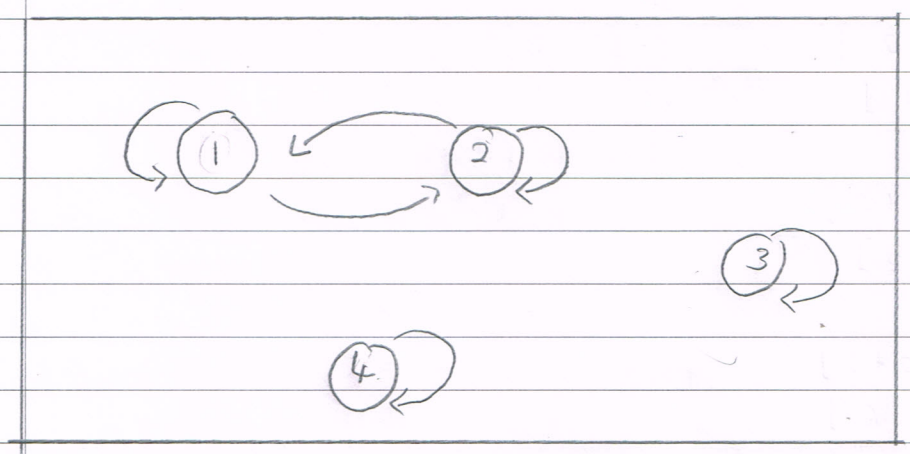
CLO1, C2

Given the relations {(1, 1), (1, 2), (2, 1), (2, 2), (3, 3), (4, 4)} on the set {1, 2, 3, 4}. Identify whether the relations given are equivalence relations?

Question 2

$R = \{(1,1), (1,2), (2,1), (2,2), (3,3), (4,4)\}$

$\xi = \{1, 2, 3, 4\}$



Reflexive

R is reflexive since all the elements in the set related to itself.

4

Symmetric

R is symmetric since 1 R 2 then 2 R 1 in R.

Transitive

R is not transitive since $(1,2) \in R$ but $(1,3)$ and $(2,3) \notin R$.

R is not an equivalent relation because R is reflexive and symmetric but not transitive.

Subject:..... No:.....

Date:

Question 3

Illustrate the graph for the function $f(x) = \lfloor x+2 \rfloor$ for the range of $-5 \leq x \leq 5$.

$\lfloor -5+2 \rfloor \quad \lfloor 5+2 \rfloor$

$= \lfloor -3 \rfloor \quad = \lfloor 3 \rfloor$

$\lfloor -4+2 \rfloor \quad \lfloor 4+2 \rfloor$

$= \lfloor -2 \rfloor \quad = \lfloor 4 \rfloor$

$\lfloor -3+2 \rfloor \quad \lfloor 3+2 \rfloor$

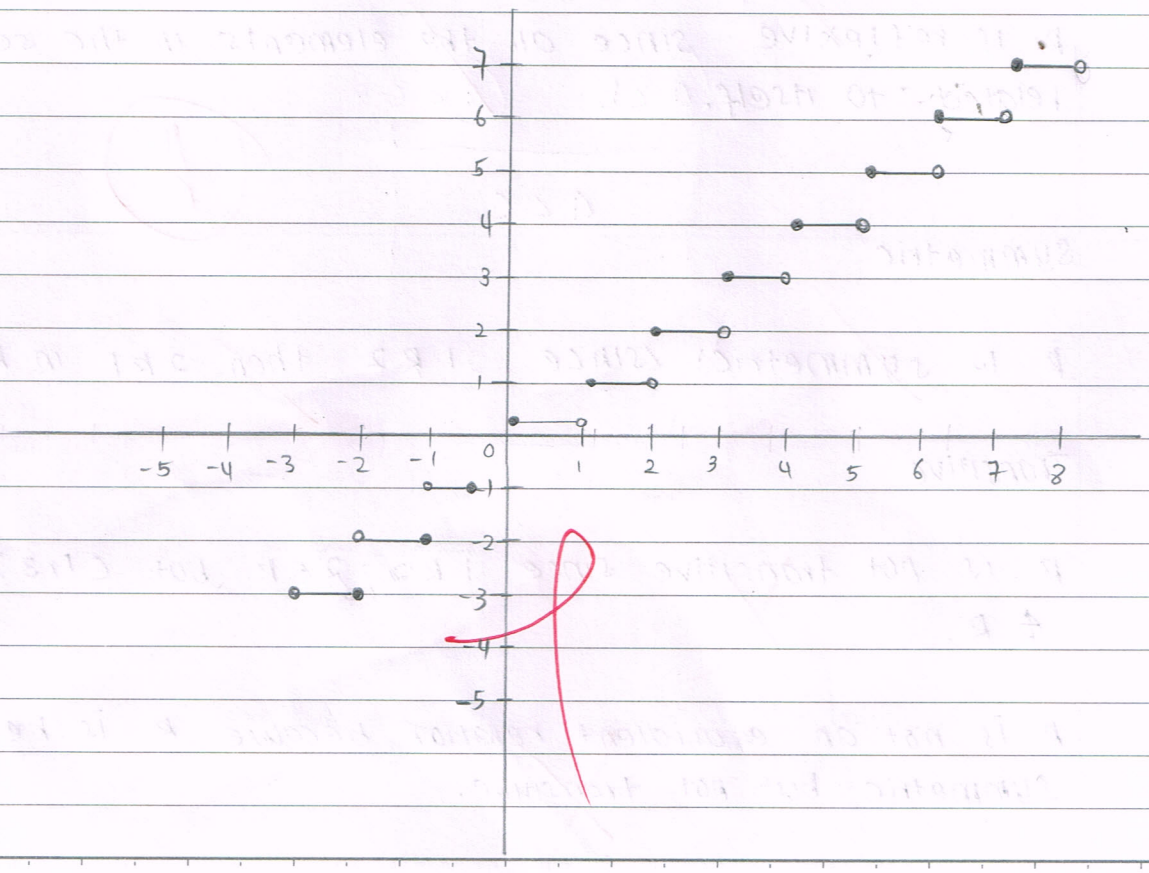
$= \lfloor -1 \rfloor \quad = \lfloor 5 \rfloor$

$\lfloor -2+2 \rfloor \quad \lfloor 2+2 \rfloor$

$= \lfloor 0 \rfloor \quad = \lfloor 6 \rfloor$

$\lfloor -1+2 \rfloor \quad \lfloor 1+2 \rfloor$

$= \lfloor 1 \rfloor \quad = \lfloor 7 \rfloor$



Subject:

No:

Date:

Question 4

Let $f(x) = -3x + 7$ and $g(x) = 2x^2 - 8$. Compute $fg(-2)$

$f[g(x)] = f(2x^2 - 8)$

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6